

LIST OF CLAIMS

Claims 15, 18-20, 24, 44, 56-60, 62-65, 67, and 69 have been previously canceled.

Please cancel claim 66 without prejudice.

Please amend claims 49 and 61 as shown herein.

Claims 1-14, 16-17, 21-23, 25-43, 45-55, 61, and 68 are pending and are listed following:

1. (previously presented) A method, comprising:
 - receiving audio content from one or more sources;
 - providing an audio content component for each source of audio content, each audio content component generating event instructions from the received audio content;
 - processing the event instructions to produce audio instructions;
 - dynamically generating audio rendition managers that each correspond to an audio rendition, an audio rendition manager including dynamically allocated components that include a synthesizer component, audio buffers, and logical buses that each correspond to one of the audio buffers;
 - routing the audio instructions to the audio rendition managers that process the audio instructions to render the corresponding audio renditions;
 - processing the audio instructions with the synthesizer component to generate multiple streams of audio wave data;

1 assigning at least one of the multiple streams of audio wave data to more
2 than one of the logical buses where the logical buses receive the at least one
3 stream of audio wave data from the synthesizer component; and

4 routing audio wave data streams assigned to a particular logical bus to the
5 audio buffer corresponding to said particular logical bus.

6
7 **2. (original)** A method as recited in claim 1, wherein each audio
8 content component is a component object having an interface that is callable by a
9 software component, the software component directing said generating the event
10 instructions.

11
12 **3. (previously presented)** A method as recited in claim 1, wherein
13 each audio rendition manager is a component object having an interface that is
14 callable by a software component, the software component performing said
15 routing the audio instructions to the audio rendition managers.

16
17 **4. (previously presented)** A method as recited in claim 1, further
18 comprising providing a software component, wherein each audio content
19 component is a component object having an interface that is callable by the
20 software component, the software component directing said generating the event
21 instructions, and wherein each audio rendition manager is a component object
22 having an interface that is callable by the software component, the software
23 component performing said routing the audio instructions to the audio rendition
24 managers.

1
2 **5. (previously presented)** A method as recited in claim 1, further
3 comprising dynamically generating a performance manager that performs said
4 providing an audio content component for each source of audio content, and
5 performs said dynamically generating the audio rendition managers that each
6 correspond to an audio rendition.

7
8 **6. (previously presented)** A method as recited in claim 1, the
9 method further comprising dynamically generating a performance manager as a
10 component object that performs said providing an audio content component for
11 each source of audio content, and performs said dynamically generating the audio
12 rendition managers.

13
14 **7. (previously presented)** A method as recited in claim 1, further
15 comprising dynamically generating a performance manager as a component
16 object, wherein each audio content component is a component object having an
17 interface that is callable by the performance manager, the performance manager
18 directing said generating the event instructions, and wherein each audio rendition
19 manager is a component object having an interface that is callable by the
20 performance manager, the performance manager performing said routing the audio
21 instructions to the audio rendition managers.

1 **8. (previously presented)** A method as recited in claim 1, further
2 comprising dynamically generating a performance manager that performs said
3 receiving the audio content, providing an audio content component for each source
4 of audio content, processing the event instructions, and routing the audio
5 instructions.

6
7 **9. (previously presented)** A method as recited in claim 1, further
8 comprising providing a performance manager that performs said receiving the
9 audio content, providing an audio content component for each source of audio
10 content, processing the event instructions, dynamically generating the audio
11 rendition managers, and routing the audio instructions.

12
13 **10. (original)** A method as recited in claim 1, wherein the audio
14 content includes digital audio samples.

15
16 **11. (original)** A method as recited in claim 1, wherein the audio
17 content includes MIDI data.

18
19 **12. (original)** A method as recited in claim 1, wherein each audio
20 content component has one or more event instruction components that perform
21 said generating the event instructions.

1 **13. (original)** A method as recited in claim 1, wherein each audio
2 content component has one or more event instruction components that perform
3 said generating the event instructions, each event instruction component
4 corresponding to part of the received audio content.

5
6 **14. (previously presented)** A method as recited in claim 1, further
7 comprising each audio content component generating event instructions and
8 routing the event instructions to the audio rendition managers before said
9 processing the event instructions.

10
11 **15. (canceled)**

12
13 **16. (previously presented)** A method as recited in claim 1, wherein
14 the audio rendition managers receive audio instructions originating as event
15 instructions from one or more of the audio content components.

16
17 **17. (original)** A method as recited in claim 1, wherein one audio
18 rendition manager receives audio instructions originating as event instructions
19 from one or more of the audio content components.

20
21 **18-20. (canceled)**

1 **21. (previously presented)** A method as recited in claim 1, wherein
2 the synthesizer component includes multiple channel groups, each channel group
3 having a plurality of synthesizer channels to receive the audio instructions, and
4 wherein the audio rendition manager includes a mapping component having
5 mapping channels corresponding to the plurality of synthesizer channels;

6 the method further comprising:

7 assigning the mapping channels to receive the audio instructions;

8 and

9 routing the audio instructions to a particular synthesizer channel in
10 accordance with the mapping channel assignments.

11

12 **22. (original)** One or more computer-readable media comprising
13 computer-executable instructions that, when executed, direct a computing system
14 to perform the method of claim 1.

15

16 **23. (original)** One or more computer-readable media comprising
17 computer-executable instructions that, when executed, direct a computing system
18 to perform the method of claim 7.

19

20 **24. (canceled)**

21

22 **25. (original)** One or more computer-readable media comprising
23 computer-executable instructions that, when executed, direct a computing system
24 to perform the method of claim 21.

1

2 **26. (previously presented)** A method, comprising:

3 dynamically generating a performance manager that performs acts

4 comprising:

5 receiving audio content from one or more sources;

6 providing an audio content component for each source of audio content,

7 each audio content component generating event instructions from the received

8 audio content;

9 processing the event instructions to produce audio instructions;

10 dynamically generating audio rendition managers that each correspond to

11 an audio rendition, each audio rendition manager including dynamically allocated

12 components that include a synthesizer component that receives the audio

13 instructions and generates audio wave data, one or more audio buffers that process

14 the audio wave data, and logical buses that each correspond to one of the audio

15 buffers, each audio rendition manager:

16 assigning the audio wave data to one or more of the logical buses that each

17 receive one or more streams of audio wave data from the synthesizer component,

18 where at least one stream of audio wave data is assigned to more than one of the

19 logical buses; and

20 routing the audio wave data assigned to a particular logical bus to the audio

21 buffer corresponding to said particular logical bus to render the corresponding

22 audio renditions.

23

24

25

1 **27. (original)** A method as recited in claim 26, wherein the
2 performance manager is a component object having an interface that is callable by
3 a software component.

4

5 **28. (original)** A method as recited in claim 26, wherein the
6 performance manager is a component object, and wherein each audio content
7 component is a component object having an interface that is callable by the
8 performance manager, the performance manager directing said generating the
9 event instructions.

10

11 **29. (original)** A method as recited in claim 26, wherein each audio
12 rendition manager is a component object having an interface that is callable by a
13 software component.

14

15 **30. (original)** A method as recited in claim 26, wherein the
16 performance manager is a component object, and wherein each audio rendition
17 manager is a programming object having an interface that is callable by the
18 performance manager.

19

20 **31. (previously presented)** A method as recited in claim 26, wherein
21 the performance manager is a component object that performs said dynamically
22 generating the audio rendition managers, and wherein each audio rendition
23 manager is a component object having an interface that is callable by the
24 performance manager.

1
2 **32. (original)** A method as recited in claim 26, wherein the audio
3 content includes digital audio samples.

4
5 **33. (original)** A method as recited in claim 26, wherein the audio
6 content includes MIDI data.

7
8 **34. (original)** A method as recited in claim 26, wherein each audio
9 content component has one or more event instruction components that perform
10 said generating the event instructions.

11
12 **35. (original)** A method as recited in claim 26, wherein each audio
13 content component is a component object having an interface that is callable by
14 the performance manager, and wherein each audio content component has one or
15 more event instruction components that are component objects having an interface
16 that is callable by the audio content component, the one or more event instruction
17 components performing said generating the event instructions.

18
19 **36. (previously presented)** A method as recited in claim 26, further
20 comprising each audio content component generating event instructions, and
21 routing the event instructions to the audio rendition managers before said
22 processing the event instructions.

1 **37. (previously presented)** A method as recited in claim 26, further
2 comprising a particular audio content component generating event instructions,
3 said processing the event instructions to produce audio instructions, and routing
4 the audio instructions resulting from the particular audio content component to the
5 audio rendition managers.

6
7 **38. (previously presented)** A method as recited in claim 26, wherein
8 the audio rendition managers receive audio instructions originating as event
9 instructions from one or more of the audio content components.

10
11 **39. (original)** A method as recited in claim 26, wherein one audio
12 rendition manager receives audio instructions originating as event instructions
13 from one or more of the audio content components.

14
15 **40. (original)** A method as recited in claim 26, wherein the
16 synthesizer component is a component object having an interface that is callable
17 by a software component.

18
19 **41. (original)** A method as recited in claim 26, wherein each audio
20 rendition manager is a component object, and wherein the synthesizer component
21 is a component object having an interface that is callable by the audio rendition
22 manager providing the synthesizer component.

1 **42. (previously presented)** A method as recited in claim 26, wherein
2 the one or more audio buffers are component objects, each audio buffer having an
3 interface that is callable by a software component.

4
5 **43. (previously presented)** A method as recited in claim 26, wherein
6 each audio rendition manager is a component object, and wherein the one or more
7 audio buffers are component objects, each audio buffer having an interface that is
8 callable by the audio rendition manager providing the audio buffer.

9
10 **44. (canceled)**

11
12 **45. (previously presented)** A method as recited in claim 26, wherein
13 the synthesizer component includes multiple channel groups, each channel group
14 having a plurality of synthesizer channels that receive the audio instructions, and
15 wherein each audio rendition manager includes a mapping component having
16 mapping channels corresponding to the plurality of synthesizer channels, each
17 audio rendition manager;

18 assigning the mapping channels to receive the audio instructions; and

19 routing the audio instructions to the synthesizer channels in accordance
20 with the mapping channel assignments.

21
22 **46. (original)** One or more computer-readable media comprising
23 computer-executable instructions that, when executed, direct a computing system
24 to perform the method of claim 26.

1
2 **47. (original)** One or more computer-readable media comprising
3 computer-executable instructions that, when executed, direct a computing system
4 to perform the method of claim 31.

5
6 **48. (original)** One or more computer-readable media comprising
7 computer-executable instructions that, when executed, direct a computing system
8 to perform the method of claim 45.

9
10 **49. (currently amended)** An audio generation system, comprising:
11 a performance manager having an audio content component that generates
12 event instructions from audio content received from one or more sources, the
13 performance manager being dynamically generated and configured to process the
14 event instructions to produce audio instructions;

15 audio rendition managers that are dynamically generated and that each
16 correspond to an audio rendition, an audio rendition manager configured to receive
17 the audio instructions and process the audio instructions to render the
18 corresponding audio rendition, the audio rendition manager having dynamically
19 allocated processing components including:

20 a synthesizer component having multiple channel groups, each channel
21 group having a plurality of synthesizer channels configured to process the audio
22 instructions to generate audio wave data;

23 a mapping component having mapping channels corresponding to the
24 plurality of synthesizer channels, the mapping component configured to designate

1 the synthesizer channels that receive the audio instructions via the respective
2 mapping channels;

3 one or more audio buffers configured to process the audio wave data; and
4 a multi-bus component that defines logical buses corresponding
5 respectively to the one or more audio buffers, the multi-bus component configured
6 to receive the audio wave data at the defined logical buses where at least one
7 stream of audio wave data is assigned to more than one of the logical buses, and
8 the multi-bus component further configured to route audio wave data that is
9 received at a particular logical bus to the audio buffer corresponding to the
10 particular logical bus.

11
12 **50. (original)** An audio generation system as recited in claim 49,
13 further comprising a second audio rendition manager that corresponds to a second
14 audio rendition, the second audio rendition manager configured to receive the
15 audio instructions and process the audio instructions to render the corresponding
16 second audio rendition.

17
18 **51. (original)** An audio generation system as recited in claim 49,
19 further comprising a second audio rendition manager that corresponds to a second
20 audio rendition, the second audio rendition manager configured to receive the
21 audio instructions and process the audio instructions to render the corresponding
22 second audio rendition, wherein the audio rendition and the second audio rendition
23 are rendered together.

1 **52. (original)** An audio generation system as recited in claim 49,
2 wherein the performance manager is a component object having an interface that
3 is callable by a software component.

4
5 **53. (original)** An audio generation system as recited in claim 49,
6 wherein the audio rendition manager is a component object having an interface
7 that is callable by a software component.

8
9 **54. (original)** An audio generation system as recited in claim 49,
10 wherein the performance manager is a component object, and wherein the audio
11 content component is a component object having an interface that is callable by
12 the performance manager.

13
14 **55. (original)** An audio generation system as recited in claim 49,
15 wherein the performance manager is a component object, and wherein the audio
16 rendition manager is a component object provided by the performance manager,
17 the audio rendition manager having an interface that is callable by the performance
18 manager.

19
20 **56-60. (canceled)**

1 **61. (currently amended)** An audio rendition manager, comprising:
2 a dynamically allocated synthesizer component having channel groups that
3 each have synthesizer channels configured to receive audio instructions and
4 produce one or more streams of audio wave data from the received audio
5 instructions;

6 an additional dynamically allocated synthesizer component having
7 additional channel groups that each have additional synthesizer channels
8 configured to receive the audio instructions and produce the one or more streams
9 of audio wave data from the received audio instructions;

10 a dynamically allocated mapping component having mapping channels
11 corresponding to the synthesizer channels and the additional synthesizer channels,
12 the mapping component configured to receive the audio instructions from one or
13 more sources, designate the synthesizer channels and the additional synthesizer
14 channels that receive the audio instructions via the respective mapping channels,
15 and route the audio instructions to the synthesizer channels and to the additional
16 synthesizer channels; ~~and~~

17 a plurality of dynamically allocated audio buffers that receive one or more
18 of the streams of audio wave data; and

19 a dynamically allocated multi-bus component that defines logical buses
20 corresponding respectively to the plurality of audio buffers, the multi-bus
21 component configured to receive the one or more streams of audio wave data at
22 the defined logical buses and route one or more of the streams of audio wave data
23 received at a particular logical bus to the audio buffer corresponding to the

1 particular logical bus, and wherein at least one stream of audio wave data is
2 assigned to more than one of the defined logical buses.

3

4 **62-67. (canceled)**

5

6 **68. (previously presented)** An audio rendition manager as recited in
7 claim 61, further comprising a dynamically allocated performance manager that
8 receives audio content from one or more sources, the performance manager
9 configured to instantiate an audio content component for each source of audio
10 content, each audio content component generating event instructions from the
11 received audio content, and wherein the performance manager is configured
12 to process the event instructions to produce the audio instructions.

13

14 **69. (canceled)**